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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,639	12/20/2000	Akio Goto	NEC-2130US	4751

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EXAMINER

WANG, GEORGE Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/739,639

Applicant(s)

GOTO, AKIO

Examiner

George Y. Wang

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11, 12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuyuki et al. (J.P. Pub. No. 10054917, from hereinafter "Yasuyuki") in view of Miura et al. (U.S. Patent No. 6,170,996, from hereinafter "Miura").

3. As to claim 1-2 and 4, Yasuyuki discloses an optical waveguide module (fig. 1) in which transmitted signal light emitted from a laser light emitting element passes through a first optical waveguide (fig. 1, ref. 14) and a second optical waveguide (fig. 1, ref. 17) to strike a transmitting/receiving medium such as an optical fiber (fig. 1, ref. 18), and where the signal light from transmitting/receiving medium passes through second optical waveguide and is received by light-receiving element (fig. 1, ref. PD).

However, Yasuyuki fails to specifically teach a first light-blocking resin covering over the monitoring light-emitting element and first optical waveguide and a second light-blocking resin covering part over the monitoring light receiving element and second optical waveguide.

Miura discloses an optical waveguide module with an absorptive, light-blocking resin covering (fig. 1, ref. 24) over the coupling part between the monitoring light-receiving device (fig. 1, ref. 18) and the optical waveguide (fig. 1, ref. 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an absorptive, first light-blocking resin covering over the monitoring light-emitting element and first optical waveguide and a second absorptive, light-blocking resin covering part over the monitoring light receiving element and second optical waveguide since one would be motivated to improve optical light isolation and reliability (col. 1, ref. 11-20). Resins are well known in the art for fixative and light-blocking properties. Optical loss occurs when light strays, but with light-blocking resin to cover the monitoring light-emitting and receiving elements coupling parts, one of ordinary skill in the art would recognize that optical isolation and noise reduction would significantly be improved. Furthermore, resin coverings provide a lost-cost optical module that is easily manufactured and is easily connectable to external transmission lines (col. 1, lines 54-59).

4. As to claim 3, Yasuyuki and Miura disclose an optical waveguide module as recited above, however, references do not specifically disclose filling the coupling parts of the optical module with transparent resin.

Miura discloses an optical waveguide module with a transparent resin covering (fig. 1, ref. 18).

Art Unit: 2871

It would have also been obvious to one ordinary skill in the art at the time the invention was made to fill the coupled areas with transparent resin since one would be motivated by its high optical transmissivity. A transparent resin efficiently permits the transmission and reception of optical signals to and from the optical fibers (col. 5, lines 7-16).

5. Regarding claims 5-6, Yasuyuki discloses an optical waveguide module as recited above with a reflective, light-blocking plate (fig. 1, ref. 13), disposed above the first optical waveguide, which blocks transmitted signal light missing the light-emitting coupling part, but fails to specifically teach that the plate does not intercept a core of the waveguide.

6. Miura discloses an optical waveguide module having a light-blocking plate (fig. 11, ref. 40), disposed above the first optical waveguide, which blocks transmitted signal light missing the light-emitting coupling part without intercepting a core of the waveguide.

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a light-blocking plate above the first optical waveguide since one would be motivated to not only block transmitted signal light missing the light-emitting coupling part without intercepting a core of the waveguide, but also to accommodate and protect the soft resin from any adverse effect on the optical element and coupling region enclosed within (col. 7, lines 49-67).

Response to Arguments

8. Applicant's arguments filed 21 July 2003 have been fully considered but they are not persuasive.

Applicant argues that the references fail to teach two separate light-blocking resins and specifically notes that since Miura teaches an optical element, not both an LD or PD, that such a configuration would be impossible. However, Examiner notes that the Miura reference is generic because it teaches that the use of light-blocking resin is common and applicable to any optical element (fig. 1, ref. 10). Furthermore, even if the Miura reference was specifying only one of the LD or PD element, Applicant's argument would still be weak because it has been held that mere duplication of the essential working parts of a device and rearranging parts of an invention involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ ; *In re Japiske*, 86 USPQ 70.

Regarding Applicant's argument regarding the light-blocking plate, it is clear, and even Applicant admits, that there is a Miura, fig. 11, ref. 40, discloses a light-blocking plate disposed above the first optical waveguide, which blocks transmitted signal light missing the light-emitting coupling part. Although Applicant goes to great length to disclose the difficulty in forming such a structure, especially with the resin injection, Applicant fails to structurally distinguish the claimed invention from that of the prior art.

Therefore, Examiner holds to the validity of the Yasujuki and Miura references and maintains rejection.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 703-305-7242. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Application/Control Number: 09/739,639

Page 7

Art Unit: 2871

gw

August 6, 2003


T. Choudhury
Primary Examiner